Caribou Biosciences Announces New Research Collaboration and Equity Investment Agreements with Novartis

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- **COMPANIES TO EXPLORE PROMISE OF CRISPR AS A DRUG DISCOVERY RESEARCH TOOL**

Caribou Biosciences, a developer of technology-based solutions for cellular engineering, today announced that it entered into a collaboration agreement with Novartis under which the two companies will utilize Caribou's proprietary CRISPR-Cas9 platform to research new CRISPR-based drug target screening and validation technologies.

Under the terms of the agreement, Caribou will receive funding for a one-year collaborative research program and Caribou will provide Novartis an option to non-exclusively license research use rights of the Caribou CRISPR-Cas9 platform. Caribou also announced that it has completed a separate Series A investment agreement with Novartis, the terms of which were not disclosed.

“We are thrilled to begin this collaboration with a recognized industry leader like Novartis and to gain access to its vast expertise in drug discovery,” said Rachel Haurwitz, Ph.D., Chief Executive Officer and co-founder of Caribou Biosciences. “This is an exciting time in the evolution of Caribou and we consider both the collaboration and equity agreements with Novartis to be important milestones and key accelerators for our pursuit of multiple and valuable market opportunities for our CRISPR-Cas9 platform.”

Caribou is advancing its CRISPR-Cas9 platform in drug target screening and validation to help overcome the limitations of current RNAi-based approaches. Traditional RNAi-screening technologies yield only a partial, transient suppression of target gene expression, or a “knockdown”. This process may result in either little or inconsistent changes in a cell or animal model as the siRNA is eliminated from cells over time. By inducing a stable, complete knockout of specific genes, CRISPR-Cas9 may offer a superior means of identifying genes representing attractive therapeutic targets. In addition, RNAi screens are also known to exhibit a high background, which can lead to both false negatives and the need for highly redundant libraries to ensure statistical significance. As Caribou's CRISPR platform can utilize guide RNAs specific for unique sequences and can target a gene at numerous sites, it offers the potential to reduce the high background by tuning the system for greater specificity.

Caribou’s technologies are based on research into the biology of CRISPR systems carried out by the Doudna Lab at the University of California, Berkeley, and their collaborators. At the core of Caribou's extensive CRISPR technologies IP portfolio is an exclusive license to the foundational CRISPR-Cas9 work from the University of California and the University of Vienna. This work was recently recognized by the award of a Breakthrough Prize to Caribou co-founder Jennifer Doudna, Investigator, Howard Hughes Medical Institute and Professor, U.C. Berkeley and her collaborator Emmanuelle Charpentier, Helmholtz Center for Infection Research and Umeå University.

Caribou’s strategic focus is on building and deploying its CRISPR-Cas9 technology platform through relationships with industry leaders in multiple market sectors. By partnering with companies in diverse application areas, Caribou is able to integrate discoveries from therapeutic research, agricultural biotechnology and industrial biotechnology to develop the platform further.

About Caribou Biosciences

Caribou Biosciences is a developer of technology-based solutions for cellular engineering and analysis based on CRISPR-Cas9 biology. Caribou’s tools and technologies provide transformative capabilities to basic and applied biological research, therapeutic development, agricultural biotechnology, and industrial biotechnology.

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